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EXAMINER	
LEE, RIP A	
ART UNIT	**PAPER NUMBER**
1713	

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,210	Applicant(s) DZIKOWICZ, ROBERT THOMAS	
	Examiner Rip A. Lee	Art Unit 1713	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 20* is/are rejected.

7)☒ Claim(s) *15 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *04-20-2004*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 15 is objected to because of the following informalities: The location of the prepositional phrase "in the form of a film" is awkward. A latex can not be in the form of a film. Either removing the phrase or using the preposition "into" is acceptable. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Use of the term "capable" renders claim 7 indefinite because it is not clear whether the film indeed possesses the recited tensile strength. Note that any polyisoprene is capable of forming a film having the requisite tensile strength if it is cured appropriately and if the film is thick enough. Since claims 8-14 depend from claim 7, they are subsumed under the rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,466,757 to Watanabe *et al.*

Watanabe *et al.* teaches an accelerator system comprised of a thiourea compound (component B) and a dithiocarbamate (component E) (see abstract). Dibutylthiourea (col. 11, line 14) and zinc dibutyldithiocarbamate (col. 12, line 39) are exemplified in the text. Use of another accelerator is contemplated (component X); the compound sodium mercaptobenzothiazole is desribed in col. 13, line 12.

6. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 1,185,896 to Cain *et al.*

Example L of Cain *et al.* shows an accelerant system comprised of zinc diethyldithio-carbamate, thiourea, and zinc mercaptobenzothiazole.

7. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,594,073 to Crepeau *et al.*

Crepeau *et al.* discloses an accelerator system containing diethylthiourea (ETU), zinc dimethyldithiocarbamate (ZMDC), and a mercaptobenzothiazole (MBT) in entry 3 of Table I.

8. Claims 1-5 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,618,861 to Saks *et al.*

Saks *et al.* teaches use of an accelerator system comprising 0.2 phr of zinc dibutyldithiocarbamate, 0.2 phr of zinc diethyldithiocarbamate, 0.2 phr of diphenylthiourea, and additionally, zinc mercaptobenzothiazole per 100 phr of polyisoprene latex (example 2). Since the composition of the prior art is essentially the same as that presented in the instant claims, it possesses the same physical properties. Therefore, it is deemed that the material is quite capable of forming a film having a tensile strength of 3000-5000 psi, as recited.[†]

[†] Products of identical chemical composition can not have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ 1655, 1658 (Fed. Cir. 1990).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,618,861 to Saks *et al.* in view of U.S. Patent No. 6,828,387 to Wang *et al.*

Saks *et al.* teaches a method of curing synthetic polyisoprene latex with an accelerator system comprised of a dithiocarbamate and a thiourea (example 2). The product formed by dipping is a film (col. 2, line 20). The patent is silent with respect to curing time and temperature. The prior art of Wang *et al.* also relates to manufacture of polyisoprene film, and the inventors teach a process for curing the rubber comprising heating at 120 °C for about 20 minutes (col. 7, line 17). Thus, regarding claim 15, one of ordinary skill in the art would have found it obvious to use the conditions shown in Wang *et al.* to cure the polyisoprene rubber of Saks *et al.* because the secondary reference teaches that these conditions are suitable for curing polyisoprene. Regarding the recitation of physical properties, a reasonable basis exists to believe

that the combination of teachings would result in the formation of polyisoprene film having the would be essentially the same. Since the PTO does not conduct experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

The remaining claims describe meaningful developments of the instant invention, and the subject matter of these claims is obvious over Saks *et al.* Example 2 shows that the dithiocarbamate accelerators are zinc dibutyldithiocarbamate and zinc diethyldithiocarbamate. The accelerator package further contains zinc mercaptobenzothiazole. The intended use of the material is for manufacture of gloves (see figures). Since these embodiments are taught in the prior art, the skilled artisan would have found it obvious to follow these teachings and arrive at the present claims.

12. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The claim is drawn to a method of curing polyisoprene latex with an accelerator system comprised of a dithiocarbamate and 1,3-dibutylthiourea. None of the cited references teaches this combination, and one of ordinary skill in the art would not have found it obvious to arrive at the claimed subject matter using the references singularly or in combination.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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March 16, 2005